

Panasonic

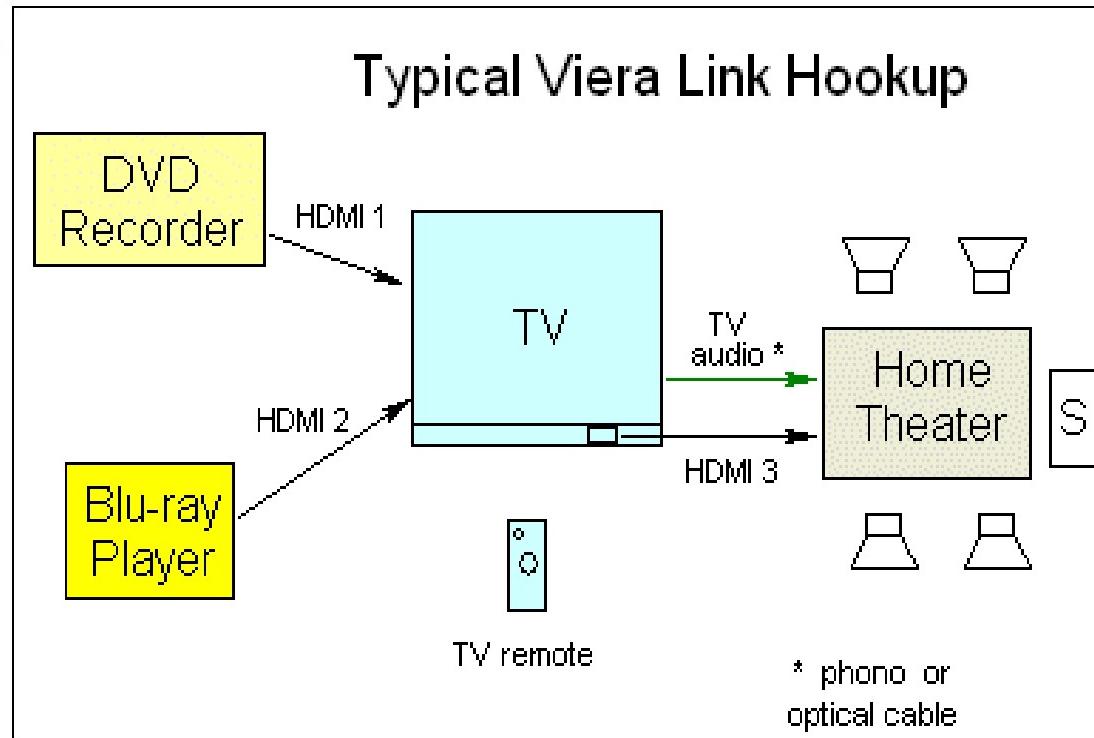
Technical Guide

VIERA Link™ Setup Series

Applies to :

Viera Link™
& EZ Sync™
& HDAVI Control™
Panasonic Products

**HDMI™ - CEC
(Consumer
Electronic
Control)**



Panasonic Service and Technology Company
National Training

Panasonic ideas for life

**Prepared by
Instructor Herb Chin
Panasonic Service and Technology Company
National Training**

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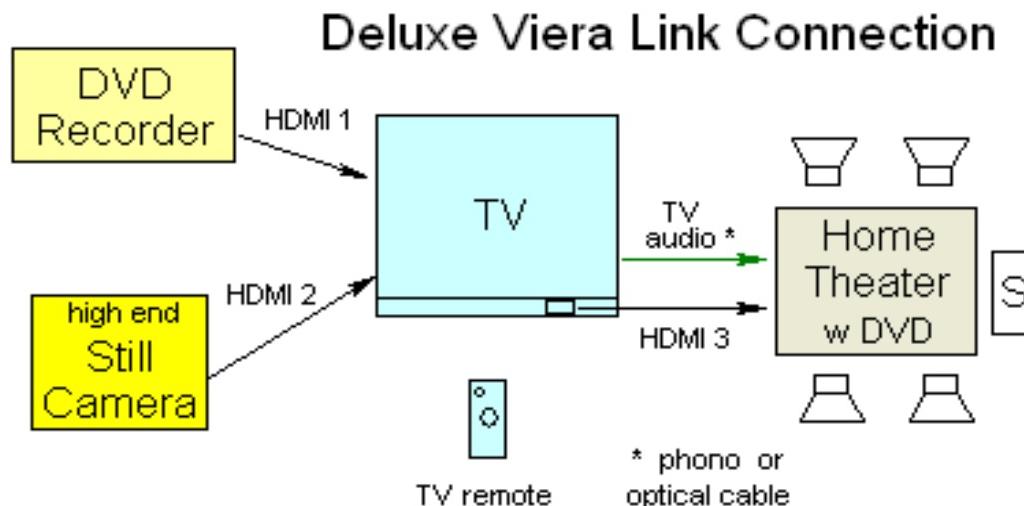
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 **Warning**

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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Normal Operation - What Can Viera Link do?

Viera Link Operation :

- Pressing the PLAY button turns on the player.
- The player turns on the TV, and the TV turns on the Home theater for sound.
- Each product automatically selects the correct input of the product that turned the TV on.
- When the TV turns off, all linked products turn off also. Changing an input unlinks that product.

Details:

Power ON - Press the (disc player's) PLAY button and the product will turn on along with the TV (if a disc is inside).
The TV in turn will power on the Home theater for sound.

Power OFF - Power the TV OFF and the corresponding linked products will power OFF too. However if the Home theater input was changed from Aux/TV to (listen to) FM, that action unlinks that product for that time. Then only the TV will power off. Turning off a product also unlinks that product.

Input Selection - The TV automatically selects the HDMI input that turned the TV on. The Home theater automatically selects analog Aux input (not HDMI) for TV sound. If the TV was turned on alone, the TV would select the last input used.

Audio Path - Audio comes through the HDMI cable except for the Home theater sound. TV sound to the Home theater comes from the TV's analog Left and Right audio output. [If the Home theater is HDMI or AC disconnected, the TV will sense the control loss and automatically switch to TV speakers. If the Home theater product has a intergral DVD player, this DVD audio will not be sent to the TV speakers.]

Video Path - Video always passes through the HDMI cable.

Product Control - The TV remote can control the Linked product by entering its menu. Start with the remote's Viera Link button (below left). Selecting the product in the Viera Link control box turns that product on. Pressing OK permits you to display that product's menu. If 2 same (DVD players) products are Viera Link connected, you will only have access to the product plugged into the lowest HDMI number port (e.g. HDMI 1).

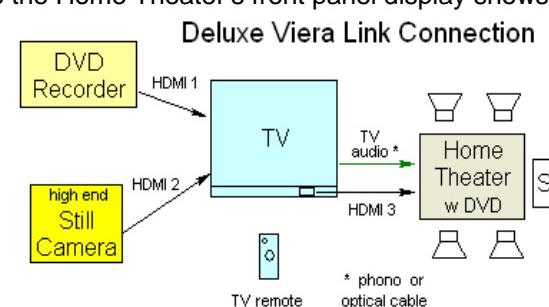
Volume Control - The TV volume buttons display "Home Theater", Vol + or - on the TV. Meanwhile the Home Theater's front panel display shows increasing or decreasing level numbers (0-50).

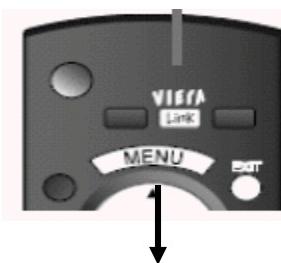


TV's
Link
menu

* Older forms of
Viera Link are:
• EZ Sync
• One Touch

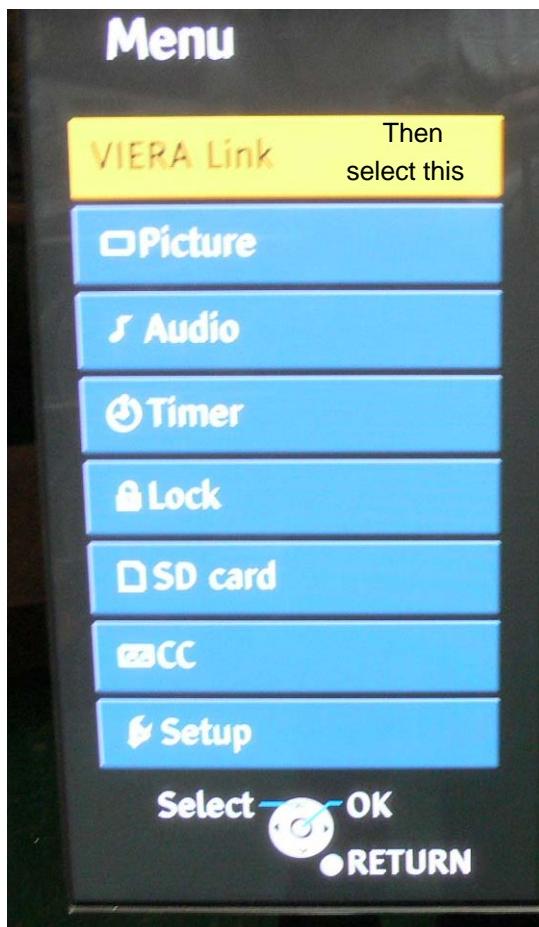
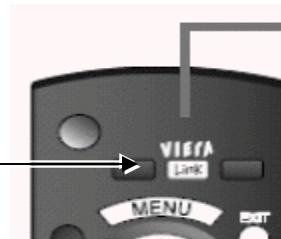
Generic name:
HDMI - CEC





Viera Link Diagnostic Page 1/2

Start with the TV
remote's
Menu or Link
button



Sample TV menu
(model TH-50PZ85)

If clicking on "VIERA
Link brings you to a
grayed out screen, ➔
then the TV knows:

- There is NO Viera Link product connected to it
or
- Viera Link is not turned ON.

Possible causes:

1. No Viera Link devices are connected via HDMI cable.
2. The connected products are not Viera Link enabled from their SETUP menus.
3. The product or the HDMI cable is defective.

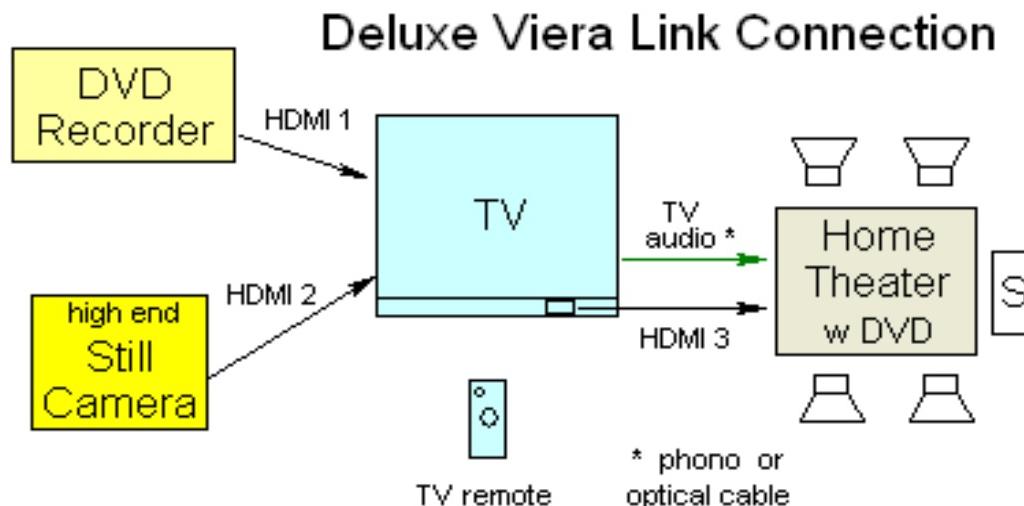


Got this? Connect products
and go to the next page.

Symptoms & Solutions 2/2

Symptom	Picture	Cause	Solution
1. Grayed out Viera Link menu parts. a) No TV sound from the home theater speakers. b) TV power does not turn on the home theater. c) DVD Play button only turns on the DVD player (not the entire system).		1. The Linked products have Viera Link turned Off. 2. Lost HDMI communications between the TV and the other product(s) (may be a bad HDMI cable - broken link). 3. Linked product(s) are not plugged into AC or no longer working (no communications on the HDMI line at power on).	1. Make sure the product is still HDMI connected to the TV by selecting that product on the TV (HDMI 1, 2 or 3). 2. Turn on Viera Link in every product's menu. Use the owner's manual or the information in the next setup pages. 3. Setup the TV menu so Home theater is the default speaker output (setup submenu).
2. A Viera Link product is missing from the Viera Link control box.		No HDMI communications with that (missing) product. [OSD Message: "Please check settings and connections on HDMI devices."]	1. Replace product's HDMI cable. 2. Find that video product on the TV's HDMI 1, 2, or 3 input. 3. Turn Viera Link on from that product's setup menu.
3. No TV sound from home theater speakers.		Missing cable that carries analog or optical TV sound to the Home theater.	In addition to the HDMI cable, connect an audio cable (L&R) between the TV audio output and the home theater aux input.
4. Does not remember settings.		1. Home theater was not set as power on default speakers. 2. TV HDMI or TV Eeprom board is defective. 3. Earlier generation One Touch products normally do not recall settings.	1. Setup the TV defaults using the information in the next few pages. 2. Replace the TV's HDMI board. 3. Upgrade to Viera Link products.
5. Product powers on but that input is not selected by the TV.		1. Earlier generation products normally do not select inputs. 2. Other manufacturer's HDMI-CEC products will power on but its input need not be selected.	Upgrade to newer Viera Link models or use the same manufacturer's products for more control. ['One Touch', Viera Link's early version may not switch inputs]

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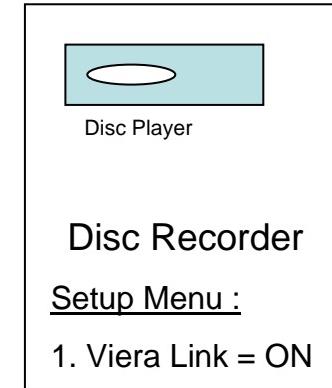
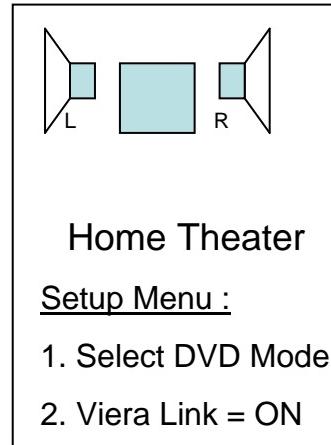
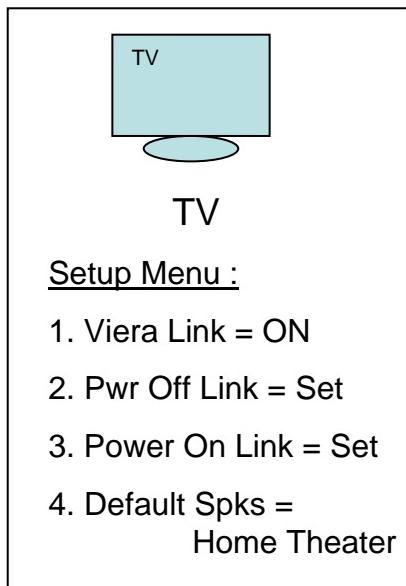
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Viera Link Setup Concept



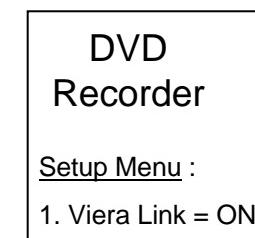
All Viera Link products must be Setup from their menus or they will not link.



Power Off Link -
TV powers OFF linked product.

Power On Link -
Product powers ON the TV.

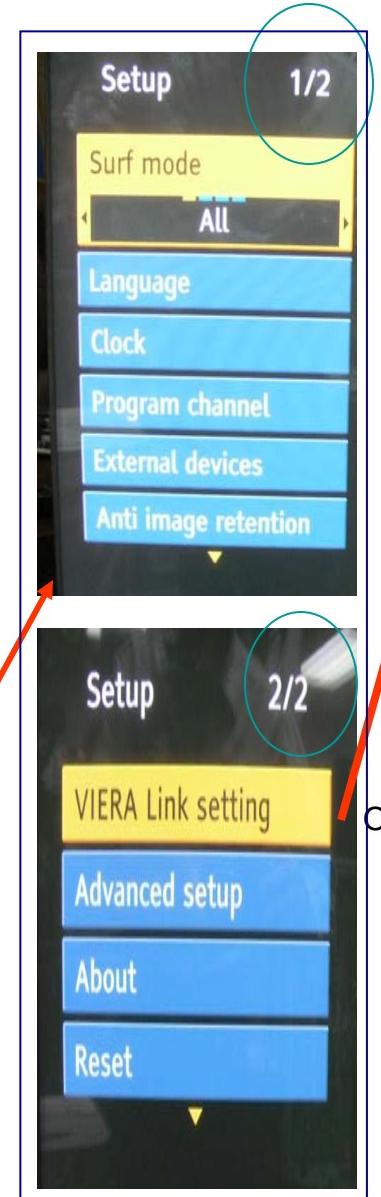
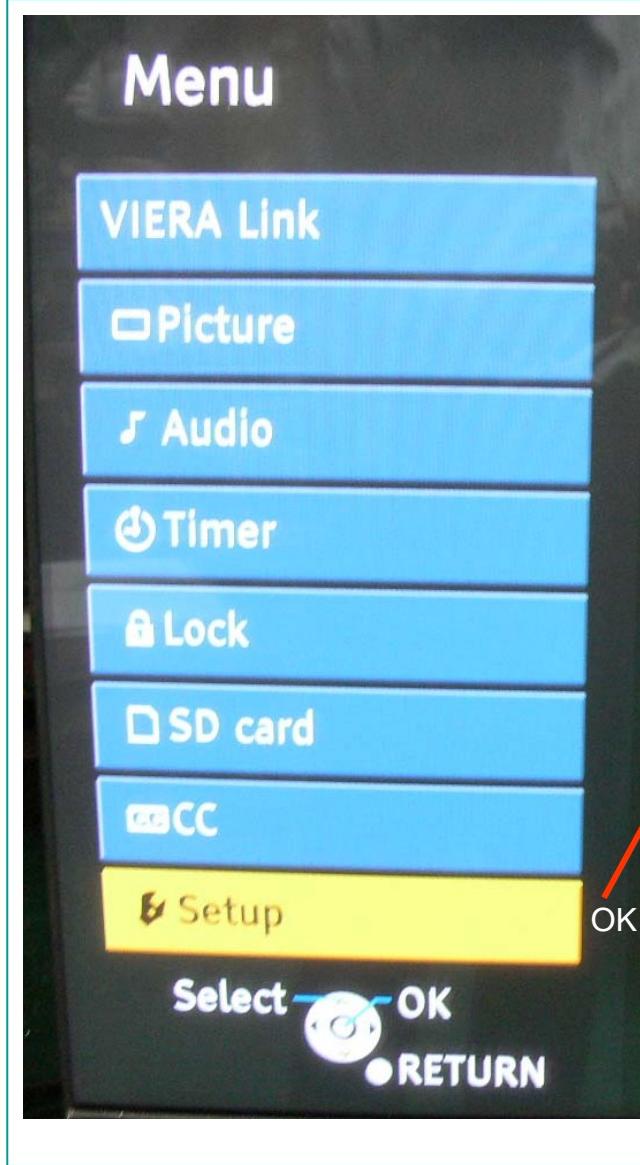
Default Spks -
At TV on, Spks will be TV or Home theater.





TV Setup 1/2

Start - Press the Menu button:



Setup:

1. Press the TV's Menu button.
2. Navigate to the 2nd page to select Viera Link.
3. Make your control selections.

Hints -

Power Off Link - TV powers OFF linked product (Set).

Power On Link - Product powers ON the TV (Set).

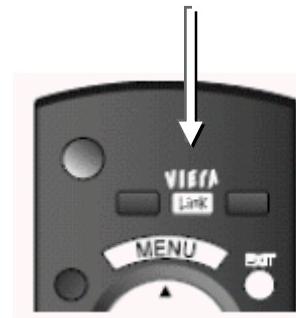
Default Spks - At TV on, the TV will select TV or Home theater speakers.

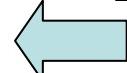


TV Setup 2/2

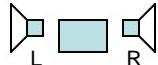
Preliminary Testing -

1. Connect all Viera Link products using HDMI cables.
On the TV remote, press the Viera Link button.



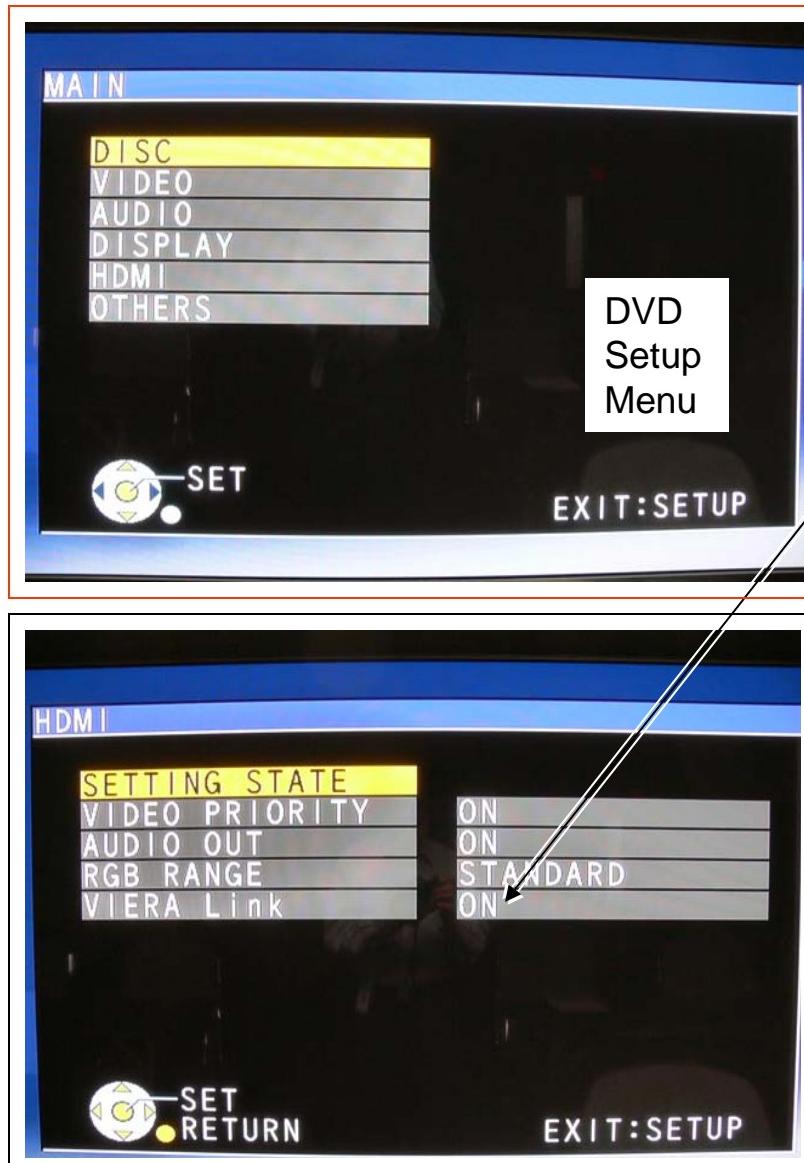
2. All Present & Past Viera Link Products should show here.

- If a Viera Link product does not appear, HDMI connect that product. Turn on that product & enter its menu. Find Viera Link and turn it ON.
 - The Viera Link product name appears but the product does not turn on when selected?
If the TV displays "Please check settings and connections on HDMI devices." (below), the selected product is not found. Cause? HDMI cable defective or the product is not plugged into AC.

Please check settings and connections on HDMI devices.



Home Theater Setup 1/1

Sample Menu Model SA-PT760

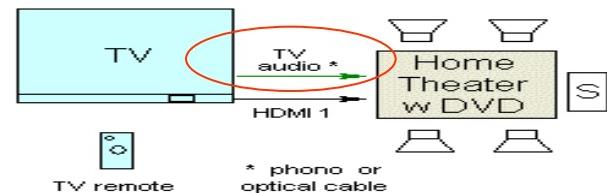


Procedure:

1. Viera Link must also be turned ON.
 - a) The Home Theater's remote SETUP button only works when in DVD mode. Select DVD and press the SETUP button to get the main menu.
 - b) Select HDMI (shown) or External connections (not shown) to get the picture below.
 - c) Change Viera Link to ON as shown. Press Setup to exit.

2. An Aux audio cable is needed for TV sound.
 - a) Analog - Connecting analog audio wires (L & R) between the TV and Home Theater will provide sound.
 - b) Digital - If a Fiber Optics cable is used instead, a digital menu setting is needed. On the PT760 receiver, press Select until either AUX or D-In input appears in the front display.
 - c) Press SETUP (remote only) and choose "TV audio" & OK. Press arrow up or down to view AUX (analog default).
 - d) Change to digital by pressing SETUP again and the arrow up button to D-In.

Basic Viera Link Connection

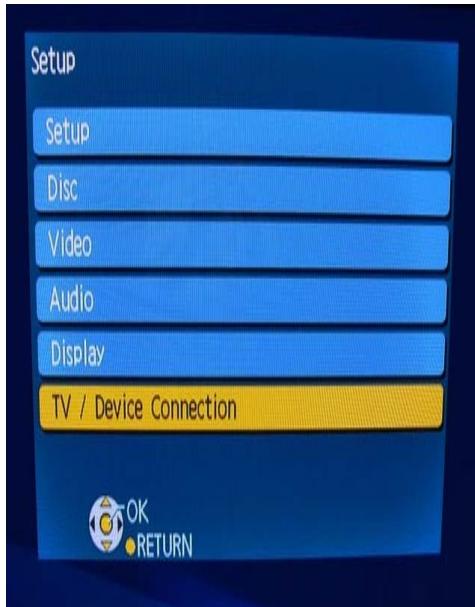




Disc Player

Blu-ray / DVD Player Setup 1/1

DVD Sample Menu
Model SC-BT100

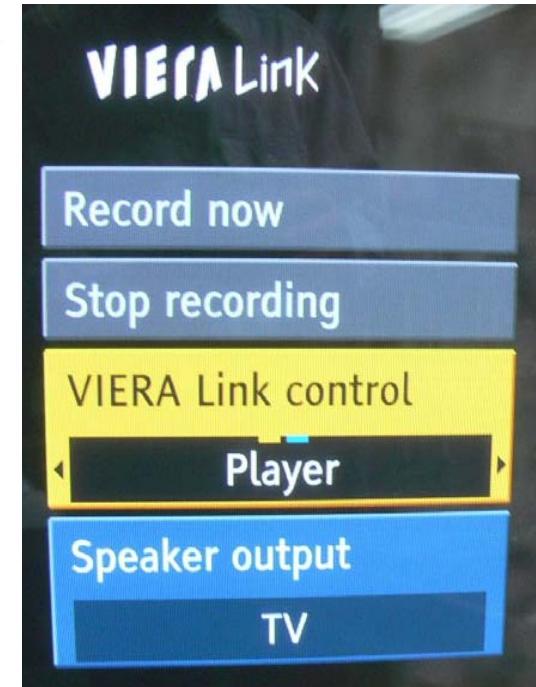


Viera Link must be turned on from the DVD menu. If the unit is more than a DVD player like the Blu-ray receiver model used for these pictures, the Setup menu button only works while in DVD mode.

Procedure:

1. Select the product's DVD mode.
2. Press SETUP (remote).
3. Select TV / Device Connection then HDMI Connection.
4. Turn Viera Link ON, then press Return to exit. (Finished)





Final Testing w the Viera Link Menu

Testing -

1. Connect all Viera Link products using HDMI cables. On the TV remote press the Viera Link button.



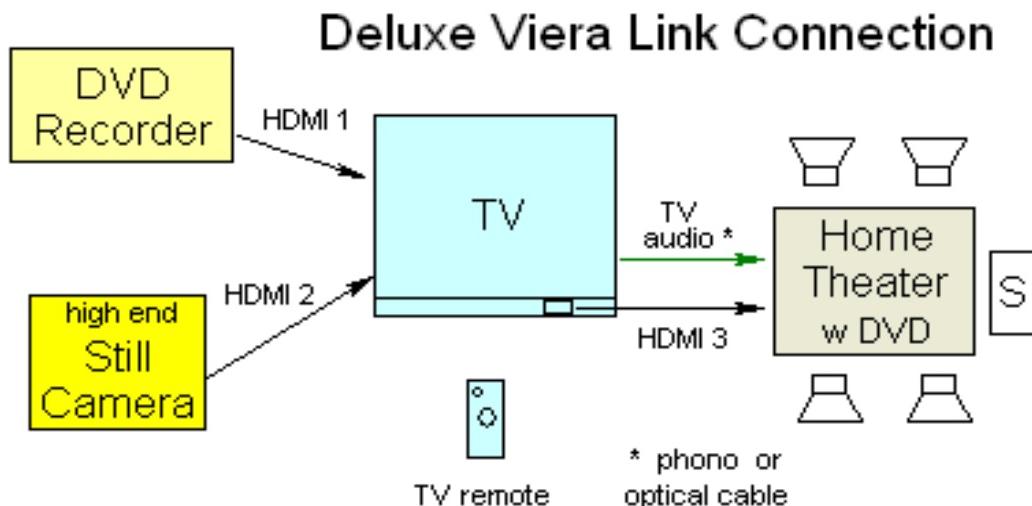
Enlarged
at left

2. At "Viera Link Control" use the arrow buttons to select Viera Link products that are HDMI connected to the TV.
3. Press ENTER to turn ON & access the product's menu.
Did you see the error message below?

The error message (below) indicates this selected device will not work because that product is HDMI or AC disconnected.



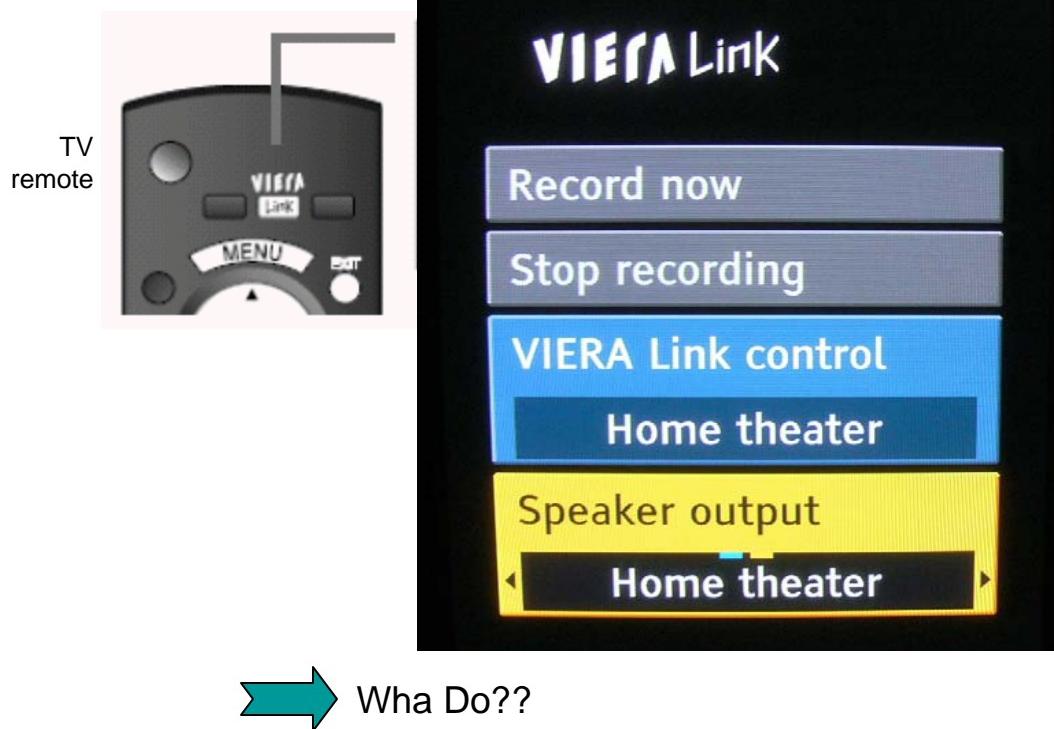
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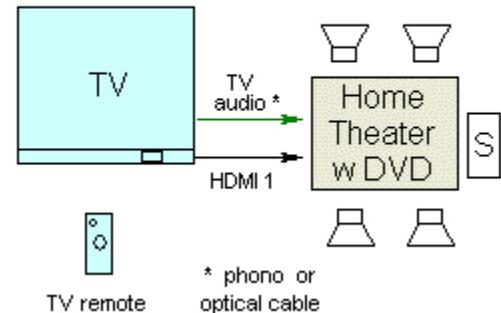
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Problem 1

- My Viera Link never worked.
- Now I do not have TV sound at all.
- When I press the volume up button, Home theater volume + appears on screen and numbers increase on the Receiver but no sound.



Basic Viera Link Connection

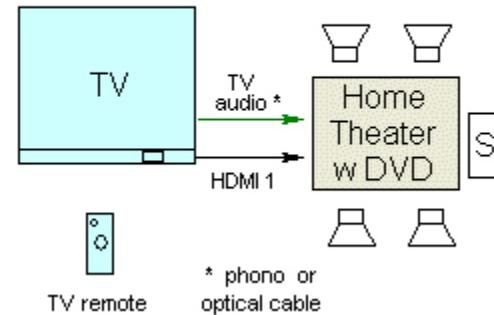


Problem 2

My Viera Link stopped working. Only the TV speakers work now.



Basic Viera Link Connection



→ Wha Do??

Objective:

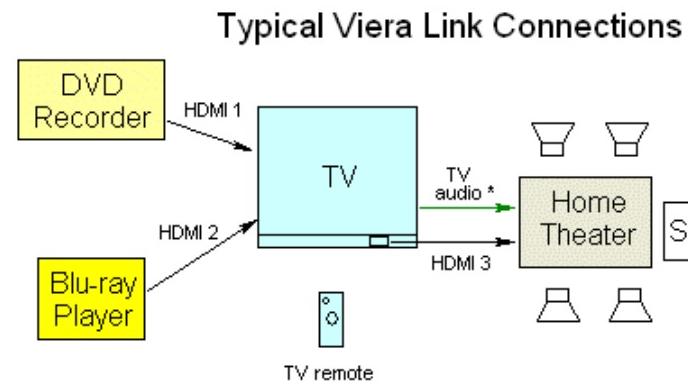
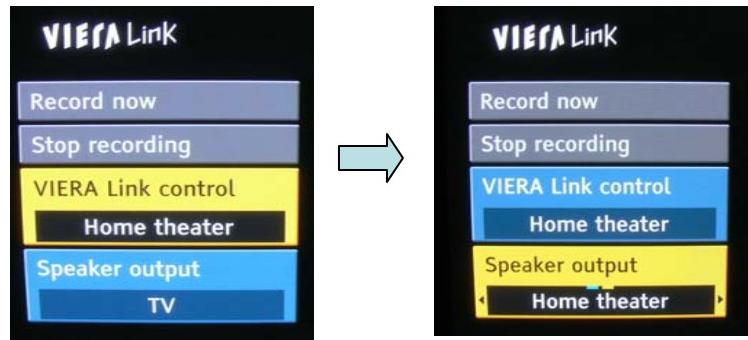


Problem 3

My Viera Link is inconsistent.

Each time I turn the TV on, I have to select Home theater sound.

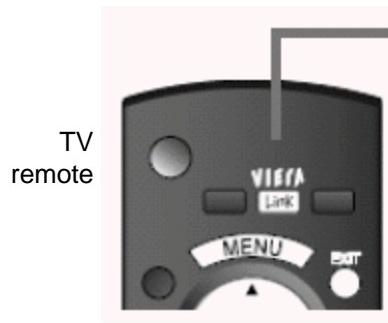
Why doesn't the TV remember that I did that?



→ Wha Do??

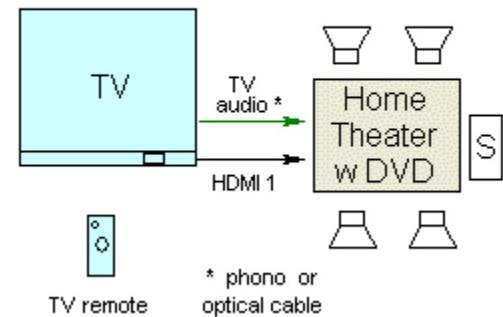
Problem 4

My Viera Link never worked. DVD plays OK on HDMI 1.



→ Wha Do??

Basic Viera Link Connection

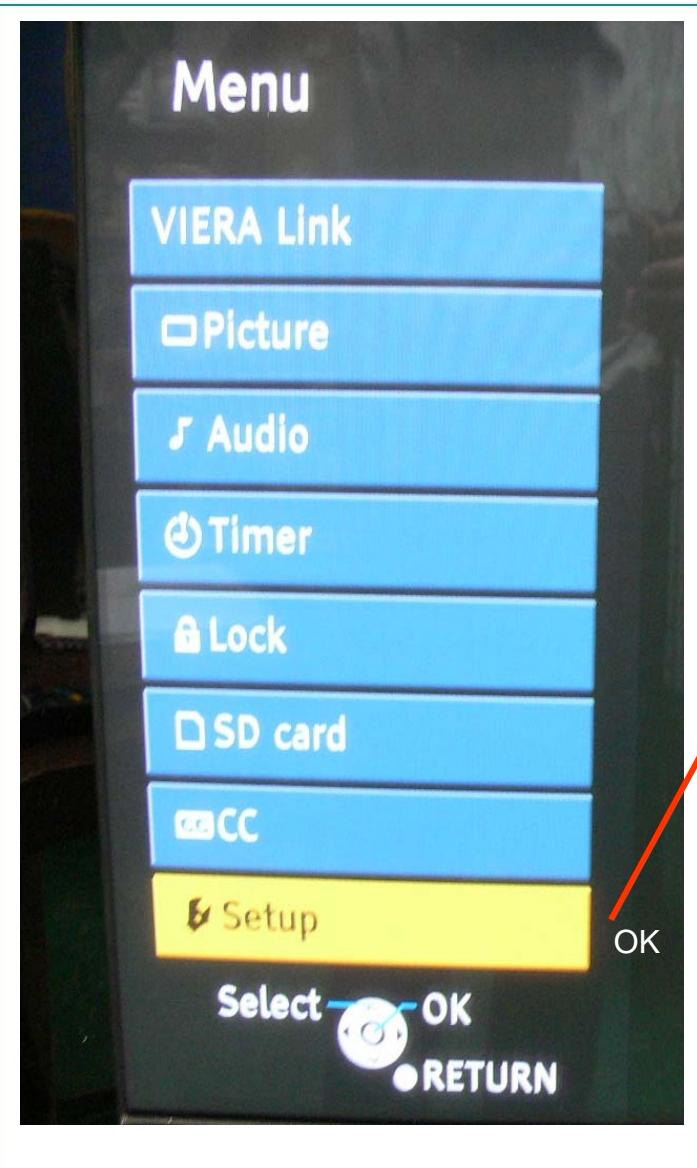


Objective:



TV Setup (for problem 4)

Start - Press the Menu button:



From the TV's Setup menu, navigate to the 2nd page to select Viera Link. Make your control selections.

Hints -

Power Off Link - TV powers OFF linked product (Set).

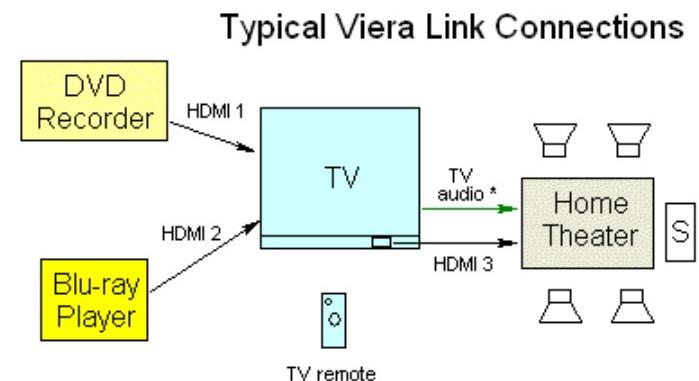
Power On Link - Product powers ON the TV (Set).

Default Spks - At TV on, the TV will select TV or Home theater speakers.

Problem 5

My Viera Link never worked right.

The TV never automatically selects the desired input at power on.



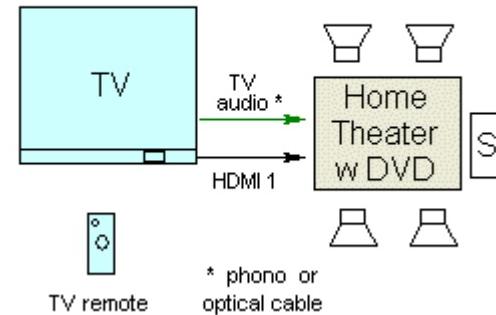
→ Wha Do??

Problem 6

- a) My Viera Link is inconsistent. I can not power OFF from the DVD but I can turn the system on.



Basic Viera Link Connection



→ Wha Do??

- b) If the movie ends and I switch to FM will the TV power off?

What if I am listening to FM and someone else shuts off the TV? Will the Home theater shut off?

Problem Answers



1. My Viera Link never worked. TV sound only works. Home theater volume number changes but no sound.

No audio cable present in the hookup. Add analog audio cables.

2. My Viera Link stopped working. Now only TV sound.

No HDMI communications. Connect Home theater with HDMI and go to the TV setup menu to set the TV for home theater as default. See setup.

3. Each time I turn the TV on, I have to select Home theater sound.

Go to the TV Viera Link Setup Menu and set Home theater as default Speaker output.

4. My Viera Link never worked. DVD plays OK on HDMI 1 though.

DVD Pix verified HDMI video connection. No communications causes Link boxes to gray out. The HDMI cable must carry both A/V & communications to the TV, either replace the HDMI board or the HDMI cable.

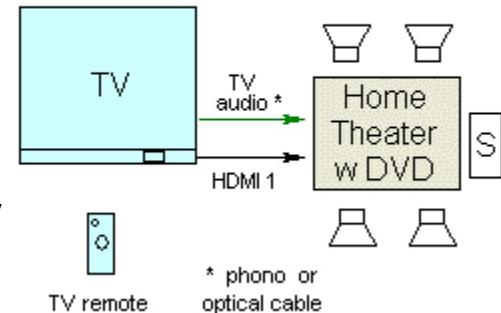
5. My Viera Link never worked. The TV never automatically selects the desired input but they turn on.

Either the products are of the non Viera Link generations or the TV can not determine the HDMI input that turned the TV on so the TV's HDMI circuit is bad. Upgrade the products to Viera Link or if it is already a Viera Link product, replace that product's HDMI board.

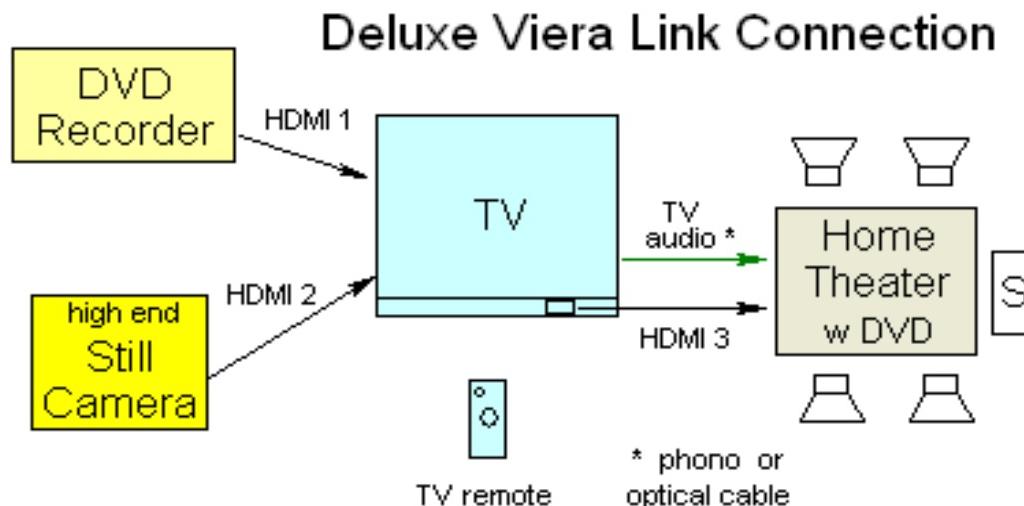
6. If the movie ends and I switch to FM will the TV power off?

- Linked products can only be automatically turned off when the TV is turned Off.
- Switching the product to a different input (e.g. FM) or powering the product off breaks the link for that time. Then the home theater will not be shut off when you turn off the TV.

Basic Viera Link Connection



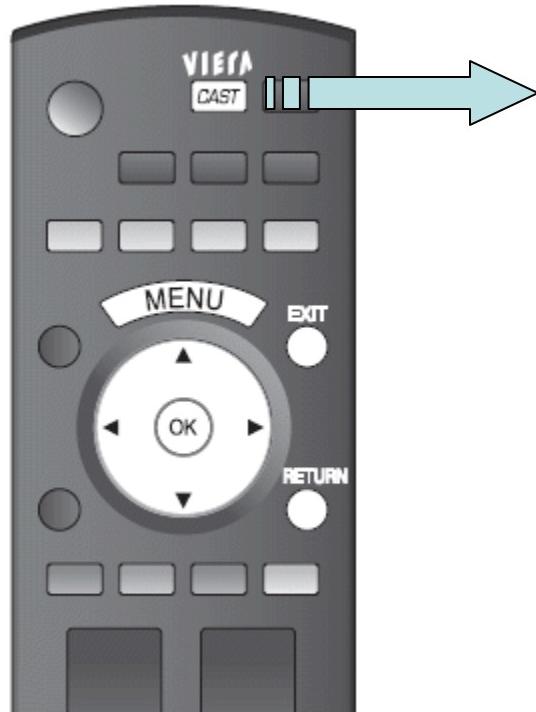
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Viera Cast = Web TV

What?



TV has built in software for Viera Cast to access Google's search engine for :

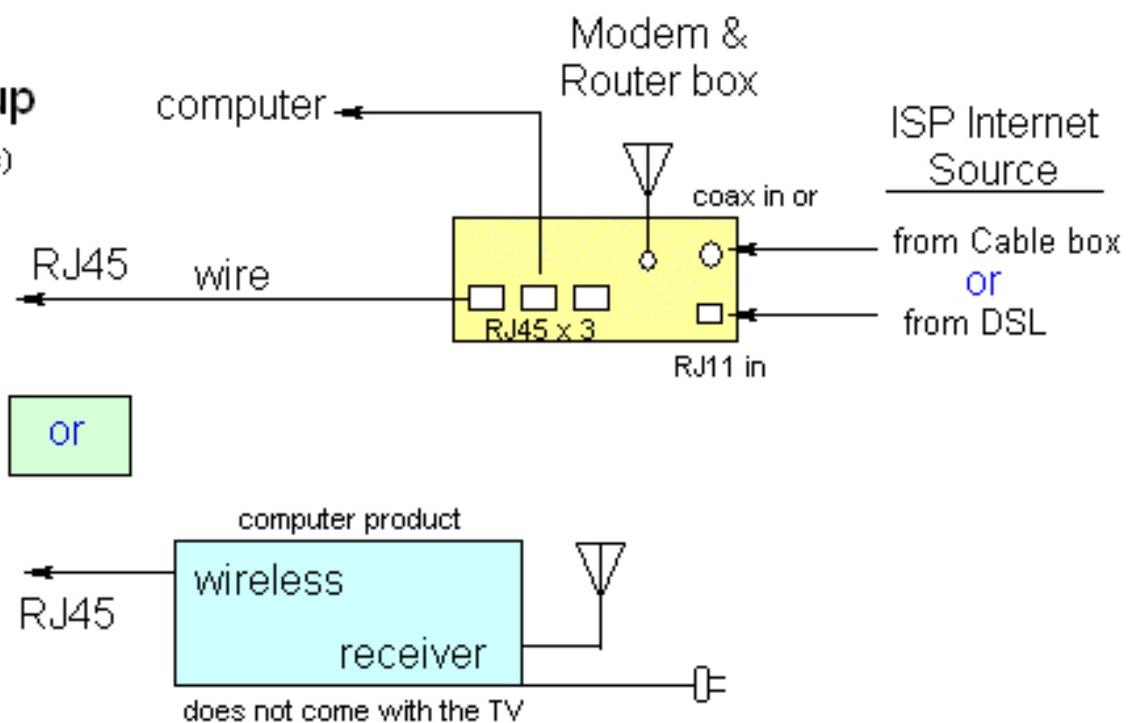
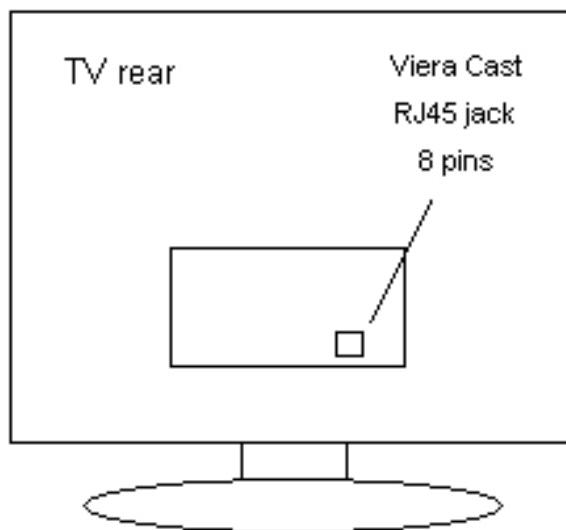
1. You Tube Videos
2. Picasa Web Album Photos
3. Bloomberg News
4. Weather Channel
5. Amazon Video On Demand
6. pending

Viera Cast - Household Hookup

How?

Viera Cast / TV Web Hookup

Network Settings Required (most households)



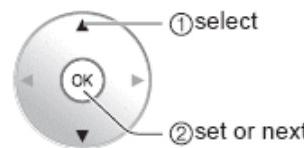
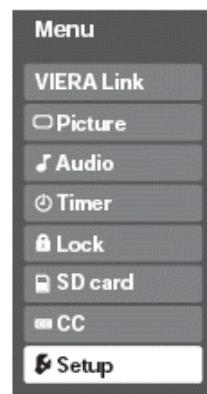
Web Network Connection - Network

1 Display menu



Go to Network Setting

2 Select “Setup”



Menu



Setup

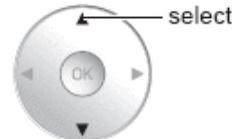


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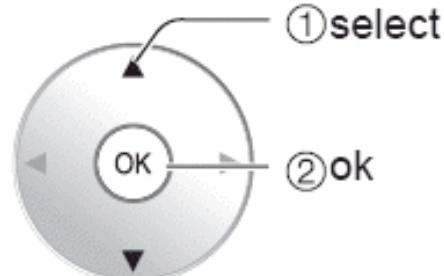
Network
setting

3 Select “Network setting”



Web Network Connection - Network

Network setting		1/2
Connection test	Succeeded	
IP setting mode	Manual	
IP address	192.168.0.5	
Sub netmask	255.255.255.0	
Default gateway	192.168.0.254	

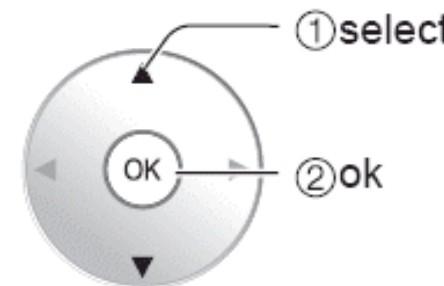


Page 1

Have the TV automatically find the ISP (Internet Service Provider)

- ① Select “IP setting mode” and set to “Automatic”.**
 (When IP automatic acquisition in DHCP can be used)

Network setting		1/2
Connection test	Succeeded	
IP setting mode	Automatic	
IP address	192.168.0.5	
Sub netmask	255.255.255.0	
Default gateway	192.168.0.254	



The acquired address is displayed.

1. Change the setting mode from Manual to Automatic.
2. Go to the next page to set the DNS.

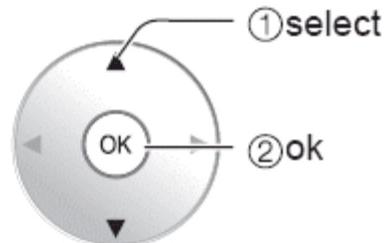
Web Network Connection - Network

- ① Select “DNS setting mode” and set to “Automatic”.
 (When DNS automatic acquisition in DHCP can be used)

Page 2

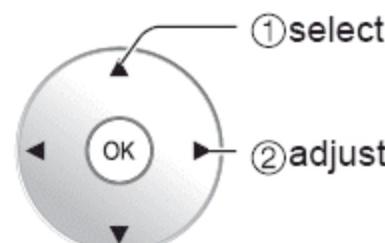
Network setting		2/2
DNS setting mode	Automatic	
Primary DNS	192.168.0.20	
Secondary DNS	192.168.0.21	

The acquired address is displayed.



- ① Select “LAN speed setting” (Default is “Automatic”)

Network setting		2/2
DNS setting mode	Automatic	
Primary DNS	192.168.0.20	
Secondary DNS	192.168.0.21	
LAN speed setting	Automatic	
LAN speed	10BASE half duplex	



1. Change the DNS setting to automatic on page 2
2. Return to page 1 to run the connection test.

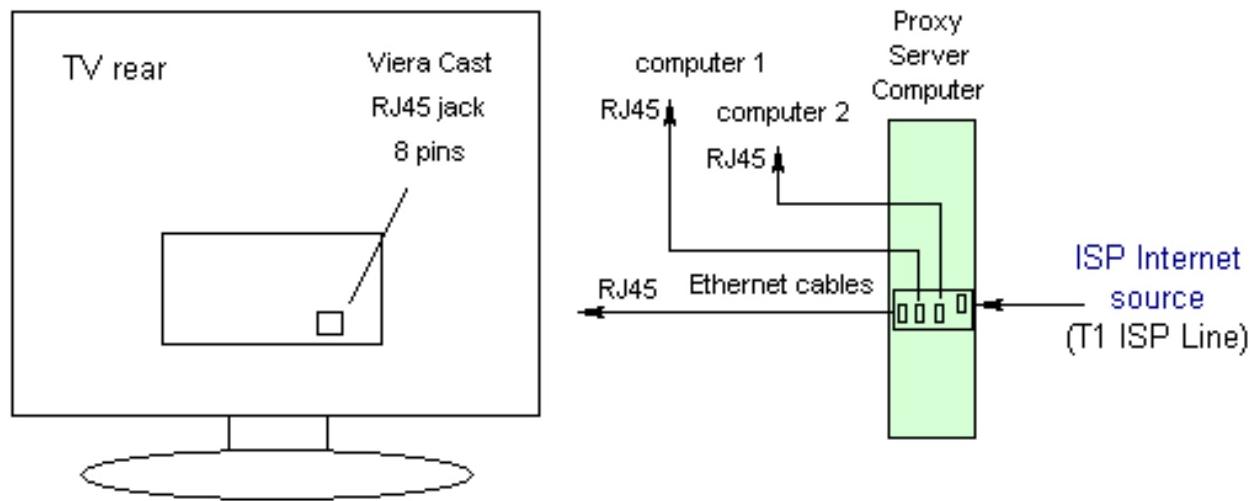
Network setting		1/2
Connection test	Succeeded	
IP setting mode	Manual	
IP address	192.168.0.5	
Sub netmask	255.255.255.0	
Default gateway	192.168.0.254	

Viera Cast - LAN Hookup (alternate connection)

How?

Viera Cast / TV Web Hookup

Proxy setting required (In Local Area Network LAN Installations)



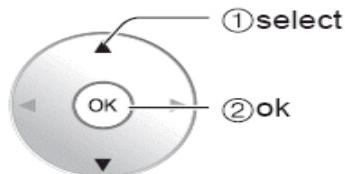
Web Network Connection - Proxy Setting

■ Proxy address

This is the address of the relay server that is connected to the target server instead of the browser and sends data to the browser.

Setting is only required if specified by the provider.

① Select “Proxy address” and Press OK



② Enter address

(see “Entering characters” below)



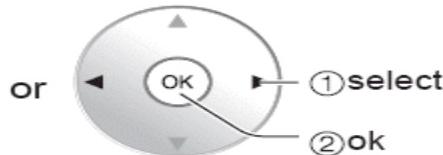
③ Select “OK”

1. The Proxy address can not be automatically added.
2. Ask for the address of the proxy server and manually add the address using the remote control.
3. From the remote, test by selecting “Connection Test” and clicking OK.

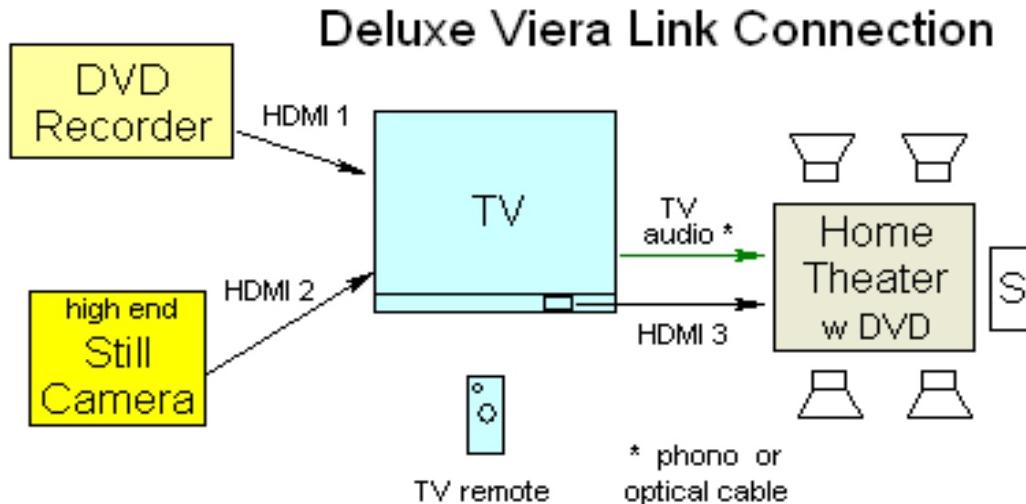
■ Proxy port

This number is specified by the provider together with the proxy address.

- ① Select “Proxy port” and Press OK.
- ② Enter the Port number.



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